five small water systems. Those results are included here.

Indio Hills, Sky Valley & areas adjacent to Desert Hot Springs

This assessment was completed in December 2002. Water from wells serving this area is considered most vulnerable to activities not associated with any detected contaminants. These are automobile repair shops, illegal activities such as unauthorized dumping and septic systems but development in the area is low density.

All four wells in the system are located in a rural area with a small amount of residential development. Although the possible contaminating activities listed exist, they occur in small numbers. No contaminants associated with any of the listed activities have been detected in these wells.

Mecca, Bombay Beach, North Shore & Hot Mineral Spa

This assessment was completed in December 2002. Water from wells serving this area is considered most vulnerable to activities not associated with any detected contaminants. These are agricultural drainage and sewer collection systems.

These wells are located within agricultural and residential areas and draw from a confined aquifer where the thickness of the confining area ranges from more than 100 feet to more than 400 feet. No contaminants associated with the listed activities have been detected and, due to this protecting clay layer, no contamination from these activities is anticipated.

Desert Shores, Salton Sea Beach & Salton City

This assessment was completed in September 2002. The only source of vulnerability to these three wells are the running of the wells themselves.

All are located in a remote area surrounded by desert with some agriculture in the outer zones. CVWD owns and maintains all of the wells. No contaminants associated with the operation of these wells have been detected in them.

Valerie Jean

This assessment was completed in October 2002. High density septic systems are considered to be the most significant activity to which these two wells are vulnerable.

The wells are located in an agricultural area with some small residential areas. The number of septic systems is small. Future development in the area is expected to include centralized sewer collection which will replace existing on-site sewage disposal facilities. No contaminants associated with septic systems have been detected in the wells.

Thermal

This assessment was completed in December 2002. Water from wells serving this area is considered most vulnerable to activities not associated with any detected contaminants. These are airport maintenance and fueling areas, agricultural drainage, illegal dumping, low density septic systems and irrigation wells.

The wells draw from a confined aquifer where the thickness of the confining layer is more than 170 feet. Due to the confining layer and depth of the sanitary seals in the wells, no contaminants associated with the activities have been detected nor are they anticipated.

Complete copies of these assessments may be viewed at Coachella Valley Water District, Highway 111 & Avenue 52, Coachella, CA 92236.

To recieve a summary of the assessments or for additional water quality data or clarification, readers are encouraged to call the district's water quality specialist, Steve Bigley, at (760) 398-2651, extension 2286.

Definitions, abbreviations & footnotes

AI—Agressive Index — This is a measurement of corrosivity. Sources with AI values of 12 or greater are non-corrosive. AI values between 10 and 12 are moderately corrosive and AI values less than 10 are corrosive.

AL—Regulatory Action Level — The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

MCL—Maximum Contaminant Level — The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to public health goals or maximum contaminant level goals as economically and technologically feasible. Secondary MCLs are set to protect the odor, taste and appearance of drinking water.

MCLG—Maximum Contaminant Level Goal — Level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the federal EPA.

mg/L — Milligrams per liter (parts per million).

MRDL—Maximum Residual Disinfectant Level — The level of a disinfectant added for water treatment that may not be exceeded at the consumer's tap.

MRDLG—Maximum Residual Disinfectant Level Goal — The level of a disinfectant added for water treatment below which there is no known or expected risk to health. MRDLs are set by the U.S. Environmental Protection Agency.

NA — Not analyzed.

ND — None detected.

ng/L — Nanograms per liter (parts per trillion).

NTU — Nephelometric turbidity units (measurement of suspended material).

pCi/L — picoCuries per liter.

PHG—Public Health Goal — Level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California EPA.

Primary Drinking Water Standard — Primary maximum contaminant levels and maximum residual disinfectiant levels for contaminants that affect health, along with monitoring and reporting requirements.

Secondary Drinking Water Standard — Based on aesthetics, these secondary maximum contaminant levels have monitoring and reporting requirements specified in regulations.

ug/L—Micrograms per liter (parts per billion).

umhos/cm — Micromhos per centimeter.

Detected parameter, units	PHG or (MCLG)	Primary or (secondary) MCL	Cove Communities [1] *Range (Average)*	Indio Hills, Sky Valley & areas adjacent to Desert Hot Springs *Range (Average)*
Aluminum, mg/L	0.6	1.0, (0.2)	ND-0.1 (ND)	ND
Arsenic, ug/L	None	50	ND-2.9 (ND)	ND
Boron, mg/L [2]	None	None	ND-0.1 (ND)	ND
Chlorate, ug/L [2]	None	None	ND-44 (ND)	NA
Chloride, mg/L	None	(500)	5.8-110 (14)	14-21 (17)
Chlorine (as CL_2), mg/L	MRDLG 4.0	MRDL 4.0	ND-1.0 (0.3)	0.1-0.4 (0.3)
Chromium, ug/L	(100)	50	ND-20 (ND)	12-18 (15)
Chromium IV, ug/L [2]	None	None	1.5-17 (7.3)	9.1-19 (15)
Color, units	None	(15)	ND-5 (ND)	ND-3 (1.5)
Copper, mg/L [3] (homes tested/ sites exceeding AL)	0.17	AL=1.3	0.13 (54/ 0)	0.12 (11/ 0)
Corrosivity, AI	None	(Non-corrosive)	11-13 (12)	12
DCPA mono & diacid degrade, ug/L [2]	None	None	ND-0.9 (ND)	NA
Electrical conductance, umhos/cm	None	(1,600)	240-1,110 (366)	570-730 (640)
Fluoride, mg/L	1	2	0.2-0.9 (0.6)	0.5-0.7 (0.6)
Foaming agents (MBAS), ug/L	None	(500)	ND-100 (ND)	ND
Gross alpha particle activity, pCi/L	None	15	1.0-9.2 (3.7)	2.3-7.0 (5.4)
Hardness (as $CaCO_3$), mg/L	None	None	29-290 (119)	120-188 (160)
Iron, ug/L	None	(300)	ND-300 (ND)	ND
Nitrate (as NO_3), mg/L	45	45	ND-44 (6.5)	ND-6.7 (3.5)
Odor threshold, units	None	(3)	ND-3.0 (ND)	ND-1 (ND)
Perchlorate, ug/L [2]	None	None	ND-5.5 (ND)	ND
Selenium, ug/L	(50)	50	ND-6 (ND)	ND
Sodium, mg/L	None	None	16-100 (26)	56-77 (67)
Sulfate, mg/L	None	(500)	15-270 (37)	143-200 (164)
Tetrachloroethylene (PCE), ug/L	0.06	5	ND-0.6 (ND)	ND
Total dissolved solids, mg/L	None	(1,000)	140-730 (223)	354-496 (417)
Total trihalomethanes, ug/L	None	80	ND-3.2 (0.6)	NA
Trichloropropane (1,2,3-TCP), ng/L [2]	None	None	ND-5.5 (ND)	ND
Turbidity, NTU	None	(5)	ND-2.2 (0.2)	ND-1.3 (0.4)
Uranium, pCi/L	0.5	20	ND-15 (3.6)	ND-8.8 (5.0)
Vanadium, ug/L [2]	None	None	4.8-32 (11)	6.6-20 (12)

)mestic water quality report

Mecca, Bombay Beach, North Shore & Hot Mineral Spa *Range (Average)*	Desert Shores, Salton Sea Beach & Salton City *Range (Average)*	Valerie Jean *Range (Average)*	Thermal *Range (Average)*	Major Source(s)
ND	ND	ND	ND	Erosion of natural deposits
14-27 (18)	ND	12	2.8-3.8 (3.3)	Erosion of natural deposits
ND	0.4	ND	ND	Erosion of natural deposits
NA	NA	NA	NA	By-product of drinking water chlorination
8.7-9.4 (9.0)	195-220 (204)	10	8.8-14 (11)	Leaching from natural deposits
ND-0.3 (0.2)	0.2-0.8 (0.3)	0.2-0.5 (0.3)	0.1-0.4 (0.3)	By-product of drinking water chlorination
ND	ND	17	22-23 (22)	Erosion of natural deposits
ND-6.7 (2.2)	ND	18	21-22 (22)	Erosion of natural deposits
ND	1	ND	ND-1 (ND)	Naturally occurring organic materials
ND (20/ 0)	0.23 (11/ 0)	ND (5/ 0)	ND (10/ 0)	Internal corrosion of household plumbing
11	12	12	11-12 (12)	Natural balance of hydrogen, carbon and oxygen
NA	NA	NA	NA	Leaching of herbicide used on grasses and weeds
219-254 (240)	1,300-1,510 (1,380)	240	251-282 (267)	Substances that form ions when in water
0.9-1.1 (1.0)	0.4-1.8 (1.2)	0.8	0.6-0.7 (0.7)	Erosion of natural deposits
ND	ND-100 (ND)	ND	ND	Municipal and industrial waste discharges
1.5-3.6 (2.2)	2.2-6.3 (4.0)	1.7	2.4-2.8 (2.6)	Erosion of natural deposits
14-22 (18)	165-221 (187)	8.9	34-47 (41)	Erosion of natural deposits
ND	ND-118 (ND)	ND	ND	Leaching from natural deposits
ND	3.6-7.3 (6.0)	2.3	2.5-2.8 (2.7)	Leaching of fertilizer, animal wastes or natural deposits
ND	ND-1.4 (ND)	ND	ND	Naturally occurring organic materials
ND	ND	ND	ND	Discharge of rocket fuel; leaching of fertilizer
ND	ND-9.9 (ND)	ND	ND	Erosion of natural deposits
38-46 (43)	196-237 (211)	46	35-40 (38)	Erosion of natural deposits
29-35 (32)	184-295 (227)	22	23-30 (27)	Leaching from natural deposits
ND	ND	ND	ND	Discharge from dry cleaners and auto shops
124-139 (134)	766-911 (820)	128	145-166 (156)	Leaching from natural deposits
NA	NA	NA	NA	By-product of drinking water chlorination
ND	ND	ND	ND	Leaching of solvents used for cleaning
0.1	0.1-1.4 (0.7)	0.1	0.1	Leaching from natural deposits
ND-2.6 (ND)	ND-5.2 (2.9)	ND	3.0-3.1 (3.0)	Erosion of natural deposits
3.4-29 (12)	22-28 (24)	46	26-31 (29)	Erosion of natural deposits

[1] Includes the communities of Rancho Mirage, Thousand Palms, Palm Desert, Indian Wells, La Quinta and portions of Bermuda Dunes, Cathedral City and Riverside County.

[2] Unregulated contaminants are those for which EPA and the California Department of Health Services have not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist both regulatory agencies in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted.

[3] Reported values are 90th percentile levels for samples collected from faucets in water user homes. No sample exceeded the regulatory action level.

Water users seek answers

Throughout the year, Coachella Valley Water District fields scores of questions about the water it supplies. Some deal with aesthetics, others with health-related concerns. Here are some of the most frequent questions and answers.

Why is it that when I first turn on one of my faucets, the water appears cloudy, but then clears up?

Tiny air bubbles–similar to those found in soft drinks and other carbonated beverages–are responsible for the cloudy water. After a while these bubbles rise to the top of the water and dissipate.

My water tastes or smells funny. Why?

In all likelihood the taste or smell comes from chlorine, which is added to protect against microbial (germ) contamination. It is not harmful in the amounts added to drinking water. CVWD has determined that adding chlorine, which it has done since 1990, is required to ensure compliance with new drinking water standards, although it is not required by the state Department of Health Services. The presence of a rotten-egg smell reflects another problem, and may be present if the temperature of a home's water heater has been turned down, which is common while residents are away for any length of time. At 98 degrees, for example, microbes can "stew" in the water heater, producing the sulfur-like smell that can be quite powerful when the faucet is turned on for the first time. At 104 degrees or hotter, however, the microbes are prevented from reproducing in high enough densities to cause the unpleasant odor. Residents are cautioned to use care when turning up the temperature of a water heater since doing so can produce water too hot for safe use in bathing/showering.

Is tap water safe for kidney dialysis machines, fish aquariums or fish ponds.

Generally speaking, no. Persons using kidney dialysis machines should contact their health-care providers to ensure that their tap water is properly treated before it is used in dialysis equipment. Chlorine has been found to be harmful to tropical fish, but chemicals to remove it readily are available from aquarium and pet stores. The chlorine will dissipate if the water sits in an aquarium (or any open container) for 24 hours before fish are introduced. Heating the water and letting it cool will speed up the process. Water in aquariums and ponds should be treated to remove chlorine before fish are introduced into either.

There is what appears to be sand in my water. How did that get in there?

All of CVWD's domestic water comes from wells drilled deep into the ground to access the local aquifer. To remove sand and other solids from water being pumped out of the ground, specially-designed screens are used. Still, some sand gets through these screens and usually settles to the bottom of the pipes used to bring water into your home. But when a large amount of water is pumped through these pipes–to fight a fire, fill water trucks or flush the delivery system, for example–this sand can get stirred up and find its way into your tap.

A salesman contacted me the other day, claiming he represented a company that manufactured devices that used an electromagnet to treat water, making it not only softer–and thus better tasting–but "wetter," thus reducing overall water consumption. I'd like to do my part to conserve water, but was this salesman telling the truth?

Water softeners have been around for a long time, but the Water Quality Association, a non-profit group representing the water-treatment industry, has a cautious view of magnetic, electromagnetic and catalytic devices, concluding there cannot be a scientific finding about the effectiveness of these appliances without specific, scientific standards, which to date do not exist. The old axiom, "If it seems too good to be true, it probably is," generally applies to many sales pitches.

What are those holding ponds northwest of Desert Hot Springs?

Those ponds trap imported water to allow it to percolate into the soil to replenish the groundwater basin. A larger groundwater recharge area has been in operation near Windy Point northwest of Palm Springs for 30 years. While CVWD and Desert Water Agency have contracts for water from the State Water Project, the plumbing isn't in place to deliver that water to the valley so the two agencies trade their State Project water for a like amount of Colorado River water taken from Metropolitan Water District's aqueduct which passes through Coachella Valley. This imported water helps keep the western valley's groundwater table stable.

How deep and how large, in miles, is the aquifer under the Coachella Valley?

The aquifer, generally is the length and width of the Coachella Valley–about 45 miles long. This water-bearing strata begins about 150 feet below the soil surface in the center of the valley–deeper on the slopes–and extends more than 1,000 feet deep. It is replenished with natural runoff from snow melt supplemented with imported supplies.